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Maturing the sustainability performance of manufacturing companies

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Product development (PD) is a key business process for sustainability integration into manufacturing companies: around 90% of the environmental, economic and social impacts across a product life cycle are determined in the initial phases of PD. Despite recognizing the needs and benefits, companies still face various challenges for an effective, consistent and successful implementation of sustainability into PD.

In order to support companies in the managerial integration of sustainability into PD and related processes (such as marketing, purchasing and manufacturing), the Ecodesign Maturity Model (EcoM2) has been developed and tested in a varied set of large manufacturing companies, such as Grundfos and Coloplast.

The EcoM2 is composed by a comprehensive body of knowledge of more than 700 sustainability best practices, organized in five maturity levels. The maturity levels represent successive stages for incorporating sustainability into business processes.

The EcoM2 application starts with a diagnosis of the current maturity profile (“as-is”) and definition of strategic goals for implementation (“to-be”) (Figure 1). Based on the gap between the “to-be” and “as-is” maturity profiles, strategic roadmaps and actions plans are deployed based on the EcoM2 body of knowledge of best practices and on the defined maturity levels. Subsequently, the projects are planned and implemented with special consideration of Change Management. The results of each project are continually evaluated throughout the improvement cycle, which is finalized by a new diagnosis that will evidence the achievements and allow the identification of other projects to be implemented towards higher maturity profiles.

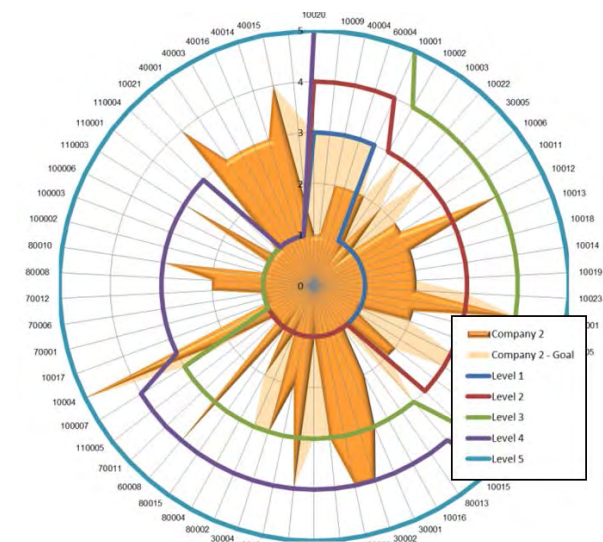


Figure1: Example of a maturity profile of a company – the maturity profile measures the integration of sustainability into product development and related processes

Further developments of the EcoM2 includes the development of a recognition scheme for companies involved in the EcoM2 implementation, which will allow a direct communication to the main stakeholders and increased competitive advantages. Furthermore, best practices for shared value, social innovation and product/service systems are being explored to broaden the focus of the EcoM2 to new areas.